

WHAT IS CLAIMED IS:

1. A method for grouping assets using a classification and regression tree based model of asset portfolios, said method comprising the steps of:

defining relevant portfolio segmentations;

assessing performance of the classification and regression tree based
5 model against a simple model; and

ranking all portfolio segments based upon performance of the models.

2. A method according to Claim 1 wherein said step of defining relevant portfolio segmentations further comprises the step of selecting segmentations based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and loan rankings.

3. A method according to Claim 1 wherein said step of assessing performance of the classification and regression tree based model against a simple model further comprises the step of computing sum of squared error (SSE) values for each relevant portfolio segment using a classification and regression tree based model and a simple model.

4. A method according to Claim 3 wherein said step of computing sum of squared error (SSE) values for each relevant portfolio segment using a classification and regression tree based model and a simple model further comprises the step of assigning an average asset price to all assets for the simple model.

5. A method according to Claim 3 wherein said step of computing sum of squared error (SSE) values for each relevant portfolio segment further comprises the step of computing an error ratio of the classification and regression tree based model to the simple model.

6. A method according to Claim 3 further comprising the step of using the classification and regression tree based model as a predictor if the error ratio is less than one.

7. A method according to Claim 1 wherein said step of assessing performance of the classification and regression tree based model against a simple model further comprises the step of computing R^2 values for each asset within each portfolio segment, where R^2 per asset is computed as (sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets \times number of assets within each segment).

8. A method according to Claim 5 wherein said step of ranking all portfolio segments based upon performance of the models further comprises the step of ranking portfolio segments based on the computed error ratio.

9. A method according to Claim 1 wherein said step of ranking all portfolio segments based upon performance of the models further comprises the step of ranking portfolio segments based upon a coefficient of determination.

10. A method according to Claim 8 where the coefficient of determination, $R^2 = 1 - (\text{sum of squared error} / \text{sum of squares total})$.

11. A system for grouping assets using a classification and regression tree based model of asset portfolios comprising:

a computer configured as a server and a database of asset portfolios;

at least one client system connected to said server through a network, said server configured to use a classification and regression tree based model to define relevant portfolio segmentations, assess performance of the classification and regression tree based model against a simple model and rank all portfolio segments based upon performance of the classification and regression tree based model and the simple model.

12. A system according to Claim 11 wherein said server is configured to select segmentations based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and asset rankings.

13. A system according to Claim 11 wherein said server is configured to compute a sum of squared error (SSE) values for each relevant portfolio segment using a classification and regression tree based model and a simple model.

14. A system according to Claim 13 wherein said server is configured with a simple model that is configured to assign an average asset price to all assets.

15. A system according to Claim 13 wherein said server is configured to compute an error ratio of the classification and regression tree based model to the simple model.

16. A system according to Claim 13 wherein said server is configured to use the classification and regression tree based model as a predictor if the error ratio is less than one.

17. A system according to Claim 11 wherein said server is configured to compute R^2 values for each asset within each portfolio segment, where R^2 per asset is computed as (sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets \times number of assets within each segment).

18. A system according to Claim 15 wherein said server is configured to rank portfolio segments based on the computed error ratio.

19. A system according to Claim 11 wherein said server is configured to rank portfolio segments based upon a coefficient of determination.

20. A system according to Claim 19 wherein said coefficient of determination is $R^2 = 1 - (SSE/SST)$.

21. A computer configured for grouping assets using a classification and regression tree based model of asset portfolios, said computer including a database of asset portfolios, said computer programmed to:

use a classification and regression tree based model to define relevant portfolio segmentations;

assess performance of the classification and regression tree based model against a simple model; and

rank all portfolio segments based upon performance of the classification and regression tree based model and the simple model.

22. A computer according to Claim 21 programmed to select segmentations based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and asset rankings.

23. A computer according to Claim 21 programmed to compute a sum of squared error (SSE) values for each relevant portfolio segment using a classification and regression tree based model and a simple model.

24. A computer according to Claim 23 programmed with a simple model that is configured to assign an average asset price to all assets.

25. A computer according to Claim 23 programmed to compute an error ratio of the classification and regression tree based model to the simple model.

26. A computer according to Claim 23 programmed to use the classification and regression tree based model as a predictor if the error ratio is less than one.

27. A computer according to Claim 21 programmed to compute R^2 values for each asset within each portfolio segment, where R^2 per asset is computed as

(sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets \times number of assets within each segment).

28. A computer according to Claim 25 programmed to rank portfolio segments based on the computed error ratio.

5 29. A computer according to Claim 21 programmed to rank portfolio segments based upon a coefficient of determination.

30. A computer according to Claim 29 wherein said coefficient of determination is $R^2 = 1 - (SSE/SST)$.

Accepted for filing